METHOD FOR SYSTEM CONSTRAINT-BASED SELECTION FOR DESIGN COMPONENTS

ABSTRACT OF THE DISCLOSURE

A method and system for engineering discovery. A block diagram of a system can be further refined by building a basic search query listing the functional requirements for block. The search query can be expanded by selecting one or more saved rules. A database can return components or subsystems that meet the criteria from the basic search query or the expanded search query. One or more candidates can be chosen from the answer set and assigned to the block. A system-constraint-based selection can compare combinations of the candidate components against a set of predefined criteria to indicate the components to be used for the system which meet those criteria. The design of the system can be accomplished by using generic descriptions rather than blocks.